AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method of fabricating a nickel silicide layer, which comprises:

providing a substrate comprising silicon ~~which optionally comprises~~ and silicon oxide;

depositing a layer of at least a 3-component metal alloy ~~comprising nickel~~ on a surface of the substrate; and

annealing the alloy and the substrate to form the nickel silicide layer,

wherein the alloy comprises nickel, titanium and platinum,

and wherein the nickel and the platinum in the alloy react with silicon at the surface and form a nickel-platinum silicide layer on the surface, and wherein the titanium reacts with any residual silicon oxide which may be present on the silicon surface to promote the reaction of nickel and platinum with silicon.

2-3. (Canceled)

4. (Original) The method of claim 1, wherein there is no substantial film agglomeration and NiS_2 formation.

5. (Original) The method according to claim 1, wherein said substrate comprising silicon includes gate, source and drain regions and contact regions.

6. (Original) The method according to claim 1, wherein the 3-component metal alloy is sputter deposited to a thickness of up to 500 Angstroms.

7. (Original) The method according to claim 1, wherein the annealing is performed at a temperature of up to 800 °C.

8. (Original) The method according to claim 1, wherein any excess metal alloy, which has not reacted with at least one surface of the substrate, is removed from the semiconductor structure.

9. (Original) The method according to claim 2, wherein the alloy consists of $Ni_{1-x-y}Ti_xPt_y$ wherein $0.25 \geq x \geq 0.02$ and $0.25 \geq y \geq 0.02$.

10. (Original) The method according to claim 1, wherein the annealing is performed in a vacuum, in nitrogen gas or in another inert gas.

11. (Original) The method according to claim 1, wherein the substrate is at least one selected from the group consisting of a (001)Si substrate, (011) Si, (111)Si and $Si_{1-x}Ge_x$, wherein $x < 1$.

12-22. (Canceled)